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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/674,627	09/29/2003	Prajakta S. Joshi	350078.409	4709
34554	7590	11/03/2006	EXAMINER	
SEED INTELLECTUAL PROPERTY LAW GROUP PLLC 701 FIFTH AVENUE, SUITE 5400 SEATTLE, WA 98104-7092			VO, TED T	
			ART UNIT	PAPER NUMBER
			2191	

DATE MAILED: 11/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/674,627

Applicant(s)

JOSHI, PRAJAKTA S.

Examiner

Ted T. Vo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 September 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,5-9 and 11-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,5-9 and 11-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 8/14/06, 9/5/06, 10/18/06.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

1. This action is in response to the amendment filed on 09/29/2003.
Claims 3-4, 10 are deleted. Claims 29, 30, 31, 31, 32, 33 are added; Claims require renumbering.
Claims 1-2, 5-9, 11-33 are pending in the application.

Specification

2. This specification **remains objected to** because it has URLs or browser executable code. The hyperlinks shown in the specification does not represent "subject matter" necessarily as part of "invention", i.e. if it is deleted or changed would be subject to 112 First paragraph. It appears that these hyperlinks can be revised without changing the scope of enablement. Therefore, according to MPEP 608.01(VII), using the type of hyperlinks, where this type is changeable is an attempt. Require the amendment pursuant to 37 CFR 1.71.

Claim numbering of Claims 31-33 is objected to. Renumbering is required.

Information Disclosure Statement

3. The cited information in Information Disclosure Statement file on 10/18/08 requires complying with

37 CFR 1.98(a)(2)(III):

(iii) For each cited pending unpublished U.S. application, the application specification including the claims, and any drawing of the application, or that portion of the application which caused it to be listed including any claims directed to that portion.

Since the documents cite the information of US pending Applications (listed in application serial numbers), these citations are considered as pending unpublished US application. Applicants require

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submitting according to 37 CFR 1.98(a)(2)(III). If a pending document is published, use its U.S. patent application publication number pursuant to 37 CFR 1.98(b)(2).

Accordingly, these documents will not be considered.

Response to Arguments

4. This addresses to the amendment and arguments given in Remarks, filed on 8/21/06.

In view of Applicants argument to the rejection under White Paper from Foundry Networks, "Server Load Balancing in Today's Web-enabled Enterprises", the argument has been fully considered, but not persuasive. Especially Applicants merely argued the White paper does teach, "the first address is a private virtual internet protocol VIP address and the second address is a public VIP address", Applicants argues the White paper does not discloses "usable with VIP address rather than real addresses". Applicants merely argued that the item 4 on page 6 of White paper does not specially mention that the IP addresses are private VIP address and public VIP address and does not mention the mapping between them.

Examiner responds:

As seen from prior arts, load balancing in network paid attentions to Net Work providers. Among the networks, the White Paper discussed and public used for more than a year before this present Application. The Specification does not discuss more detail than the White paper. The White paper discusses the subject matter included in the specification.

For example, p. 2:

In addition to new application development, organizations have invested in upgrading their servers, installing additional servers and implementing redundant systems, hoping to provide their customers with faster response times, leading to better overall customer satisfaction. But introducing multiple servers brings forth additional requirements such as quickly propagating address changes when bringing servers offline for maintenance and doing so transparently to users. Effective server management requires control of IP addressing where multiple virtual IP (VIP) addresses are being used for server farms. VIP addresses are translated to registered IP addresses before traffic is routed to the public network, thereby providing virtually unlimited availability to non-registered addresses for adding to the server farm. The ability to implement VIPs also provides quicker network updates by eliminating the need to re-address a network that requires public network interaction.

According to the White paper, the item 4 is associated with IP Addresses, and thus VIP addresses.

The terms of private and public are simply only associate with IP address of a network, for limited access, it is private, for public use, it is public. The terms using "private VIP address" and "public VIP address" cannot be patentable features over the discussion of VIP addresses in above passage.

Moreover, "private VIP address" and "public VIP address" is in the prior art. For example, P. 4

Further, SLBs also serve a role in returning the response to the client by translating the responding servers' IP address, which the enterprise may not want to make public, to the publicly registered address. This is known as Network Address Translation or NAT. This capability allows administrators tremendous flexibility in installing and managing application-dedicated servers, and demarkating public and private networks for protection against unauthorized access.

With regards to argument, "White paper does not disclose "usable with VIP address rather than real addresses"", the language VIP addresses in the above passage, "Effective server management requires control of IP addressing where multiple virtual IP (VIP) addresses are being used for server farms", tells the scalability and Management, i.e. the White paper discusses usability or association with of "VIP Addresses" in its net work.

As noted in the MPEP 714.04, it requires an amendment with pointing out the patentable features of the claims. The Amendment in this present Application fails to do so. Therefore, The rejection is made final.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-28 are rejected under 35 U.S.C. 102(b) as being anticipated by White Paper from Foundry Networks, "Server Load Balancing in Today's Web-enabled Enterprises" (Hereinafter: White Paper), 4-2002.

Given the broadest reasonable interpretation of followed claims in light of the specification.

As per Claim 1: White paper discloses, *A method, comprising:*

obtaining information related to a mapping between first (See Figure in p. 6: e.g. an address sent by a client that is not found in a local DNS) and second addresses (See Figure in p. 6: e.g. another address assigned for load balancing) associated with a resource

(See p. 6, item 3, CGS sends "this packet" to the authoritative DNS server, i.e. the authoritative DNS server obtains information); wherein the first address is a private virtual Internet protocol (VIP)

address and the second address is a public VIP address;

and sending the mapping information to a load balancing device to allow the load balancing device to load balance traffic to the resource using at least one metric associated with the second address and the mapping information (See p. 6, items 3-7, i.e. the authoritative DNS server processes process "this request" and sends IP address information. The CGS intercepts "this packet" and selects the best IP address to send to the Client in SF. The load balancing is performed by allow the client switch to the best IP address), said at least one metric being usable with VIP address rather than with real addresses.

As per Claim 2: White paper discloses, *The method of claim 1 wherein sending the mapping information to the load balancing device includes sending the second address instead of the first address to the load balancing device to allow the load balancing device to identify the second address as a public VIP address on a network device usable to access the resource. See p. 7, discussing Controller GSLB Switch that receives IP Addresses for resolving load balancing. It appears that the list of IP addresses would not include the address in the local DNS.*

As per Claim 5: White paper discloses, *The method of claim 1 wherein determining the mapping information between the first and second addresses comprises determining the mapping from user configuration input. See p. 6, seventh bullet.*

As per Claim 6: White paper discloses, *The method of claim 1 wherein determining the mapping information between the first and second addresses comprises:*
*establishing a message communication between a network device **usable to access the resource** (See communication lines in the Figure in p. 6) and a mapping device that maps the first address to the second address (switch within San Francisco, London, or Hong Kong); and*
receiving the mapping information from the mapping device via the message communication (A boundary that is pointed, as seen in the Figure. For example, "response").

As per Claim 7: White paper discloses,

The method of claim 1, further comprising:

*receiving the mapping information by a first component of a network device **usable to access the network resource** (a boundary that is pointed as seen in the Figure. For example, the arrow from Authoritative DNS to CGS, where in the reference, the Authoritative DNS sends IP address information);*
and
load balancing traffic to the resource by a second component of the network device based on the received mapping information (Referred to CGS; in this description, it provides a client with "first address" (items 6-7)).

Note: As addressed, first "network resource " and network device are not defined in the specification. It makes the claim indefinite because it does not know precisely these elements.

As per Claim 8: White paper discloses, *The method of claim 1, further comprising:*

*receiving a first mapping information for a first resource associated with a network device **usable to access the first resource** (See the Figure in p. 6, item 4, intercepts this packet);*
receiving a second mapping information for a second resource associated with the network device at a remote load balancing device (See the Figure in p. 6, item 4, the best IP address send to client in SF);
load balancing traffic to the first resource with the network device based on the first mapping information;
and load balancing traffic to the second resource by with remote load balancing device based on the second mapping information (See the Figure in p. 6, the load balancing is performed)

Note: As addressed, a *network device* and a *network resource* are not defined in the specification. It makes the claim indefinite because it does not know precisely these elements.

As per Claim 9: White paper discloses, A method, comprising:

*determining a mapping between a private **VIP** address on a network device and a public **VIP** address, both **VIP** addresses being associated with a resource accessible using the network device (See Figure in p. 6, item 4, the CGS select the best IP address);*

*if the mapping between the private **VIP** address and the public **VIP** address is determined to be present, sending the public **VIP** address instead of the private **VIP** address from the network device to a load balancing device that can load balance traffic to the resource*

(See Figure in p. 6, item 4, the CGS intercepts "this packet; select the best IP address; send the best IP address for resolving load balancing);

*and updating an address record to allow the load balancing device to interpret the received public **VIP** address as corresponding to a virtual address on the network device and to use the received public **VIP** address in connection with a load balancing metric that is based on virtual address **rather than real addresses** (See Scalability and Management, referred: adding server farm. See p. 9, Maximum Scalability, referred: "enable IT managers to create a server farm, represented by a single IP address known as a virtual IP address").*

As per Claim 11: The local DNS receive response from CGS, and see item 4 in p. 6, where in p. 7, White paper discloses that CGS selects the best IP address based on several GSLB Metrics").

As per Claim 12: See Figure in p. 6, the best IP address is select and sent.

As per Claim 13: See Figure in p. 6, the best IP address is used in load balancing.

As per Claim 14: White paper discloses,

assigning a first address and a second address to at least one server associated with a first network site (p. 6: item 4, Authoritative DNS provides a IP address information and send to Controller GSLB Switch), wherein the assigned first address is a private virtual internet protocol (VIP) address and the assigned second address is a public VIP address;

*determining mapping information between the **assigned** first and second addresses at a network device associated with the first network site (p. 6: item 4, Controller GSLB Switch receives IP address information sent from Authoritative DNS);*

sending the mapping information for the host servers (e.g. London, San Francisco, Hong Kong) associated with the first network site (e.g. www. Foundrynetworks.com) from the first network device to the load balancing device (Authoritative DNS and Controller GSLB Switch); and
*using the mapping information at the load balancing device to rank servers associated with the first network site based on at least one metric usable with virtual address **rather than real addresses** (p. 6: item 4, select the best IP address; see p. 7, first paragraph).*

As per Claim 15: With regards to the limitations recited in Claim 15: see In p. 6, see the Figure, referred: response to San Francisco, and items 6-7.

As per Claim 16: With regards to the limitations recited in Claim 16 : see in p. 2; see Scalability and Management, referred: adding server farm.

As per Claim 17: White paper discloses,

*a first component to determine presence of a mapping between a private **VIP** address and public **VIP** address (See p. 4, within SLB During Server Failure: "demarcating public and private networks"; In the reference, the Authoritative DNS can determine presence of a mapping between a private address and public address when it sends back IP address information);*

*a second component to receive the public **VIP** address instead of the private **VIP** address from the first component if mapping is present (referred to CGS; in this description, it provides a client with "first address" (items 6-7));*

*an address record that can be updated to indicate that the public **VIP** address corresponds to a virtual address (See Scalability and Management, referred: adding server farm. See p. 9, Maximum Scalability, referred: "enable IT managers to create a server farm, represented by a single IP address known as a virtual IP address");*

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*a third component to load balance traffic to the public **VIP** address based on a metric related to virtual addresses **rather than real addresses*** (the local DNS receive response from CGS, and see item 4 in p. 6).

As pre claim 18: With regards to the limitations recited in Claim 18: See the Figure in p. 6

As pre claim 19: With regards to the limitations recited in Claim 19: See the Figure in p. 6, and see item 7.

As pre claim 20: With regards to the limitations recited in Claim 20: See the Figure in p. 6.

As pre claim 21: With regards to the limitations recited in Claim 21: See rationale address in Claim 14.

As pre claim 22: With regards to the limitations recited in Claim 22: See the Figure in p. 6 and see all items 1-7.

As pre claim 23: With regards to the limitations recited in Claim 23: See the Figure in p. 6 and see all items 1-7; and see the statement in p. 7: "CGS selects the best IP address based on several GSLB Metrics".

As pre claim 24: With regards to the limitations recited in Claim 24: See rationale addressed in Claim 9 above.

As pre claim 25: With regards to the limitations recited in Claim 25: The claim is depending on Claim 24, where the scope of the claim is an article comprising a machine-readable medium having instructions: Therefore, claim 25's functionality is including instructions stored thereon to send a private address instead... See rationale Figure in p. 6, "DNS request".

As pre claim 26: With regards to the limitations recited in Claim 26: See the Figure in p. 6, "select best IP address".

As pre claim 27: With regards to the limitations recited in Claim 27: See the Figure in p. 6, "select best IP address" and item 7.

As pre claim 28: With regards to the limitations recited in Claim 28: See p. 9, Maximum Scalability, and referred: "enable IT managers to create a server farm, represented by a single IP address known as a virtual IP address".

As per Claim 29: Regarding limitation, *The method of claim 1 wherein said at least one metric is an active bindings metric that prefers a VIP address having a maximum number of active real servers bound to it.*

(See p. 4,, first bullet, Maximum Server Utilization).

As per Claims 30, 31, 31, 32, 33: See rationale address in Claim 29 above.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ted T. Vo whose telephone number is (571) 272-3706. The examiner can normally be reached on 8:00AM to 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wei Y. Zhen can be reached on (571) 272-3708.


The facsimile number for the organization where this application or proceeding is assigned is the Central Facsimile number **571-273-8300**.

Any inquiry of a general nature or relating to the status of this application should be directed to the TC 2100 Group receptionist: 571-272-2100. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for

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unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TTV
October 27, 2006

A handwritten signature in black ink, appearing to read "Ted Vo", is positioned above the printed name.

**TED VO
PRIMARY EXAMINER
TECHNOLOGY CENTER 2100**